



50277-1787 (OID-2001-150-01)

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re application of:

Confirmation No. 3935

Dimitris NAKOS et al.

Group Art Unit No.: 2172

Serial No.: 09/945,438

Examiner: Shadid Al ALAM

Filed: August 31, 2001

For: TECHNIQUES FOR MANAGING A DATABASE SYSTEM INCLUDING
ONE OR MORE DATABASE SERVERS

MS Appeal Brief-Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

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APPEAL BRIEF

Sir:

This Appeal Brief is submitted in support of the Notice of Appeal filed July 15,
2003.

I. REAL PARTY IN INTEREST

Oracle International Corporation is the real party in interest.

II. RELATED APPEALS AND INTERFERENCES

Appellants are unaware of any related appeals or interferences.

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III. STATUS OF CLAIMS

Claims 1-9 are pending in this application, have been finally rejected, and are the subject of this appeal.

IV. STATUS OF AMENDMENTS

No amendments were filed after the Final Office Action mailed on April 15, 2003.

V. SUMMARY OF THE INVENTION

The cost of owning a computer system often is far greater than the price of the initial hardware and software purchases. Computer systems frequently encounter problems that can consume an exorbitant amount of time and money. This expense is partially due to computer systems being composed of numerous layers of general-purpose components, even though the actual use of all layers is directed to a single specific application. (Specification, pages 1-3).

The invention recited in Claims 1-9 reduces the total cost of ownership of a database system implemented on a local network. The recited integrated management console deviates significantly from prior approaches to system management in that it integrates management of a database appliance at numerous levels, including two or more of the database application level, the database server level, the operating system level, and the hardware level.

According to the prior approaches, each of those levels represented a separate general-purpose product, where each of the general-purpose products was typically provided by a different source. Each of the different sources would provide separate

management software for its own general-purpose product. Consequently, systems would typically include one console running management software from one source for managing a database server, another console running management software from another source for managing an operating system, and yet another console running management software from another source for managing the hardware. Typically, each management package would itself be complex, due to the inevitable complexity of the general-purpose product that it was intended to manage. Further, because the management console for each component was provided by a different source, the consoles would not share a common user interface or management model, thereby significantly increasing the cost of management.

Figure 1 of the specification depicts an integrated management console 130 through which numerous aspects of a database system on a local area network 102 can be remotely managed. Specifically, the company that owns local area network 102 need not have its own in-house department of database and system administrators. Rather, a third party consultant is able to efficiently manage the company's database system remotely. In fact, the same third party consultant is able to manage the database systems of numerous companies in the same manner and through the same integrated management console. Consequently, the cost of the consultant's work can be shared among the many companies.

Integrated management console 130 allows an administrator to remotely manage database server appliances, both at the database server level and at the operating system level. In embodiments where the database application itself is also located on a database

appliance 110, the database application is also managed through the integrated management console 130.

Optionally, integrated management console 130 is also used to manage database appliance 110 at the hardware level. For example, hardware 116 may include a redundant array of inexpensive disks (RAID) subsystem whose operational parameters and configuration can be managed through integrated management console 130.

Because the numerous aspects of the database appliance 110 are managed through the same console that uses a consistent user interface and management model, the management chore is simplified. Further, management of the whole database appliance is significantly less burdensome than management of each of the parts of previous database systems, because each of the parts managed by integrated management console 130 is specifically tailored to the particular context in which the appliance will be used, and lacks the innate complexity of its general-purpose counterpart.

According to one embodiment, database appliance 110 includes a simple network management protocol (SNMP) compliant agent and a multi-level management agent. The integrated management console interacts with the SNMP agent using the SNMP protocol. The SNMP agent, in turn, is configured to send commands to the multi-level management agent in response to the messages received from the integrated management console. The multi-level management agent responds to the commands by performing management functions at the various levels of database appliance 110.

In the embodiment illustrated in Figure 1, the integrated management console 130 connects to and communicates with database appliance 110 through a wide area network 150, such as the Internet. However, according to an alternative embodiment, integrated

management console 130 is configured to connect to database appliance 110 through a direct dial-up connection, thus bypassing the need for infrastructure required to connect database appliance 110 to the wide area network 150, and the additional infrastructure required at the other end to connect integrated management console 130 to the wide area network 150. In some embodiments, the direct dial-up connection would still pass through a company's firewall for security reasons (Specification, page 20, line 15, through page 22, line 21).

VI. ISSUES

Issue #1: Whether Claims 1-4 and 6-9 are unpatentable under 35 U.S.C. § 102(e) over Immon et al., U.S. Patent No. 6,240,416 ("Immon").

Issue #2: Whether Claim 5 is unpatentable under 35 U.S.C. § 103(a) over Immon.

VII. GROUPING OF CLAIMS

It is respectfully submitted that Claims 1-9 do not fall or stand together, and the following groupings are asserted:

GROUP 1: Claims 1-4 and 6-9

GROUP 2: Claim 5

VIII. ARGUMENTS

A. Introduction

In the Final Office Action dated April 15, 2003, Claims 1-4 and 6-9 were rejected under 35 U.S.C. § 102(e) as being unpatentable over Immon. It is respectfully submitted

that Claims 1-4 and 6-9 are patentable over Immon for at least the reasons provided hereinafter. Claim 5 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Immon. It is respectfully submitted that Claim 5 is patentable over Immon for at least the reasons provided hereinafter.

A claim is anticipated under 35 U.S.C. § 102(e) only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631 (Fed. Cir. 1987). With respect to the present application, it is submitted, respectfully, that Immon does not in any way describe all the elements of Claims 1-4 and 6-9.

It is well founded that to establish a *prima facie* case of obviousness under 35 U.S.C. § 103(a), the references cited and relied upon must teach or suggest all the claim limitations. With respect to the present application, it is submitted, respectfully, that Immon does not in any way teach or suggest all the limitations of Claim 5.

B. Claims 1-4 and 6-9 (GROUP 1) Are Patentable under 35 U.S.C. § 102(e) over Immon Because the Elements of these Claims Are Not in Any Way Described by Immon

Claim 1 addresses the problem of how to reduce the total cost of managing a database system that includes one or more database servers. According to the approach recited in Claim 1, an integrated management module is executed at a console. The integrated management module is configured to manage at least two of the following layers in the database system: a database application layer, a database server layer, an operating system layer, and a hardware layer. A user interface provided by the integrated management module is interacted with (e.g., by a user) to change operational parameters

of the at least two layers. Immon does not in any describe the approach recited in Claim 1, because Claim 1 includes at least one element that is not in any way described by Immon.

For example, Claim 1 requires “executing, at a console, **an integrated management module configured to manage at least two of the following layers in the database system: a database application layer, a database server layer, an operating system layer, and a hardware layer**” and “interacting with a user interface provided by said integrated management module to change operational parameters of said at least two layers.” In the Final Office Action, under the heading “Response to Arguments,” the Examiner asserts that these elements are described by the text of Immon at Figure 7; at col. 9, lines 19-21; at col. 5, lines 42-45; at col. 6, lines 7-15; and at col. 6, line 32, through col. 7, line 23.

Figure 7 of Immon shows how metadata is loaded and managed into a “system of record” for a server. A “system of record” is a database that contains metadata that describes distributed data (col. 3, lines 21-22). Figure 7 shows a source 701, a workstation 702, a server 703, and a database 704. The system of record is established by the loading of metadata into workstation 702 from source 701 (col. 8, lines 65-66). Source 701 may include DBMS catalogs. The Examiner alleges that the workstation 702 is an integrated management module, and that the DBMS catalogs included in source 701 comprise at least two of a database application layer, a database server layer, an operating system layer, and a hardware layer.

There is absolutely nothing in Figure 7 that suggests that workstation 702 is **an integrated management module configured to manage at least two of the following**

layers in the database system: a database application layer, a database server layer, an operating system layer, and a hardware layer. Immon does **not** teach or suggest that workstation 702 **manages** source 701 by **changing operational parameters** of source 701. Instead, Immon discloses that workstation 702 **loads** metadata from source 701. Loading is not managing. Loading from a source does not change operational parameters of the source.

Furthermore, there is absolutely nothing in Figure 7 that suggests that source 701 comprises at least two of **a database application layer, a database server layer, an operating system layer, and a hardware layer.** The sources that may be included in source 701 are data per se. These sources are **not** database applications, database servers, operating systems, or hardware.

At col. 9, lines 19-21, Immon discloses that an administrator can insert metadata, delete metadata, or alter metadata within the system of record. However, there is absolutely nothing in Immon that suggests that the metadata comprises **operational parameters** of at least two of **a database application layer, a database server layer, an operating system layer, and a hardware layer.**

At col. 5, lines 42-45, Immon discloses that a system of record for many servers may be managed on a single server. This portion of Immon merely clarifies that the system of record, which contains metadata, does not need to be stored on the server that stores the data described by the metadata (col. 5, lines 39-42). Even if it is assumed, arguendo, that at least one of the “many servers” comprises at least two of the layers recited in Claim 1, there is absolutely nothing in Immon that suggests that the metadata

comprises **operational parameters** of at least two of a **database application layer, a database server layer, an operating system layer, and a hardware layer.**

At col. 6, lines 7-15, Immon discloses that one particular kind of topology for the collection, management, and access of metadata is a distributed topology. Even so, there is absolutely nothing in Immon that suggests that the metadata comprises **operational parameters** of at least two of a **database application layer, a database server layer, an operating system layer, and a hardware layer.**

At col. 6, line 32, through col. 7, line 23, Immon discloses (a) that the system of record consists of different data types, and (b) that metadata may be either “system of record metadata” or “deadlock metadata.” Deadlock metadata is system-specific control data. System of record metadata controls enterprise access and analysis of data. This section of Immon fails to suggest that either kind of metadata comprises **operational parameters** of at least two of a **database application layer, a database server layer, an operating system layer, and a hardware layer.** Even through metadata may be of a table name type or a table attribute type, it does not follow that the metadata comprises operational parameters of at least two of a database application layer, a database server layer, an operating system layer, and a hardware layer. Even though deadlock metadata may be system-specific, it does not follow that the metadata comprises operational parameters of at least two of a database application layer, a database server layer, an operating system layer, and a hardware layer.

The Examiner argues that Claim 1 “indicates that parameters are being configured but does not clearly point out as to what computing system level the parameters belong to.” To the contrary, Claim 1 clearly recites “operational parameters of **said at least two**

layers” where “said at least two layers” are “**at least two of the following layers in the database system: a database application layer, a database server layer, an operating system layer, and a hardware layer.**” Claim 1 clearly recites what the integrated management system manages.

The Examiner argues that “a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 152 USPQ 235 (CCPA 1967).” This is stated in MPEP 707.07(g), form paragraph 7.37.09. However, Claim 1 does not recite an intended use of a prior art structure. As is made abundantly clear in MPEP 2115, the rationale of *In re Casey* and like cases are “limited to claims directed to machinery which works upon an article or material in its intended use.” Claim 1 is not directed to such machinery, as was the claim at issue in *In re Casey*. Instead, Claim 1 recites a method. The Examiner’s argument is therefore inapposite.

Based on the foregoing, it is therefore respectfully submitted that Immon does not in any way describe at least some of the elements for which Immon was relied upon in the Final Office Action, namely, the elements in Claim 1 of “executing, at a console, **an integrated management module configured to manage at least two of the following layers in the database system: a database application layer, a database server layer, an operating system layer, and a hardware layer**” and “interacting with a user interface provided by said integrated management module to change operational

parameters of said at least two layers.” Therefore, it is submitted, respectfully, that Immon does not describe at least some elements required by Claim 1, and that Claim 1 is therefore patentable over Immon.

Claims 2-4 and 6-9 depend from Claim 1 and include all of the elements of Claim 1. Therefore, it is submitted, respectfully, that Claims 2-4 and 6-9 are patentable over Immon for at least the reasons set forth herein with respect to Claim 1.

C. Claim 5 (GROUP 2) Is Patentable under 35 U.S.C. § 103(a) over Immon

Because the Limitations of Claim 5 Are Not in Any Way Taught or Suggested by Immon

It is submitted, respectfully, that Claim 5 is separately patentable from Claims 1-4 and 6-9 because Claim 5 contains limitations that are both not required by Claims 1-4 and 6-9 and are not in any way described by Immon.

Claim 5 recites, inter alia, a RAID subsystem managed by the integrated management module. The Examiner admits that Immon does not explicitly indicate the use of RAID as storage. The Examiner argues that it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include a RAID subsystem in Immon because Immon could easily update the metadata without incurring much overhead and yet manage the newly added storage. However, the Examiner provides no support for this assertion. The Examiner does not even provide support for the assertion that a RAID subsystem was known at the time of the invention.

In *In re Dembiczak*, 50 USPQ2d 1614, 1617 (1999), the Court of Appeals for the Federal Circuit (CAFC) warned against the use of hindsight in an obviousness analysis:

Measuring a claimed invention against the standard established by section 103 requires the oft-difficult but critical step of casting the mind back to the time of invention, to consider the thinking of one of ordinary skill in the art, guided only by the prior art references and the then-accepted wisdom in the field....Our case law makes clear that the best defense against the subtle but powerful attraction of a hindsight-based obviousness analysis is **rigorous application of the requirement for a showing of the teaching or motivation to combine prior art references.** (emphasis added)

The showing must be clear and particular, and broad conclusory statements regarding the teaching of multiple references, standing alone, are not evidence. *Id.* at 1617.

In *In re Lee*, 61 USPQ2d 1430, 1434 (2002), the Court of Appeals for the Federal Circuit (CAFC) held that an examiner's conclusory statements did not adequately address the issue of motivation to combine. In *Lee*, an examiner held that it would have been obvious to a person of ordinary skill in the relevant art to combine the teachings of two references to produce a claimed invention. The first reference described a television set having a menu display by which a user could adjust various picture and audio functions, but the display lacked a demonstration of how to adjust the functions. The second reference described a game's video display as having a demonstration mode that showed how to play the game, but the second reference did not mention the adjustment of picture or audio functions. *Id.* at 1431.

In rejecting a representative claim, which recited both a demonstration mode and demonstrating the adjustment of picture functions, the examiner stated that the combination of two references "would have been obvious to one of ordinary skill in the art since the demonstration mode is just a programmable feature which can be used in many different device[s] for providing automatic introduction by adding the proper

programming software” and that “another motivation would be that the automatic demonstration mode is user friendly and it functions as a tutorial.” Id. at 1432.

In vacating the rejection, the CAFC held that the examiner did not adequately support the selection and combination of the references. The CAFC explained:

The examiner’s conclusory statements that ‘the demonstration mode is just a programmable feature which can be used in many different device[s] for providing automatic introduction by adding the proper programming software’ and that ‘another motivation would be that the automatic demonstration mode is user friendly and it functions as a tutorial’ **do not adequately address the issue of motivation to combine. This factual question of motivation is material to patentability, and could not be resolved on subjective belief and unknown authority.** (emphasis added)

In the present case, the Examiner similarly has failed to adequately address the issue of motivation to combine. In the present case, the Examiner attempts to establish a motivation to combine Immon with alleged general knowledge of RAID storage based on the conclusory statement that the combination would provide the system taught by Immon with the ability to “update the metadata without incurring much overhead and yet manage the newly added storage.” This conclusory statement, based on subjective belief and unknown authority, is remarkably similar in its subjectivity to the inadequate motivation offered by the examiner in *Lee* that a demonstration mode was “user friendly” and “functions as a tutorial.” In the present case, the belief that one would be motivated to combine the teachings of the Immon with alleged general knowledge of RAID storage to provide the system taught by Immon with the ability to “update the metadata without incurring much overhead and yet manage the newly added storage” is completely subjective, and the authority on which this belief is founded is completely unknown.

Furthermore, the avoidance of incurring overhead has nothing at all to do with what is described in Immon.

Like the motivations to combine presented by the examiner in *Lee*, the motivation presented by the Examiner in the present case is neither clear nor particular, and can only be characterized as being both broad and conclusory. Consequently, Appellants submit that the Examiner has not met his burden in making out a *prima facie* case of obviousness in the present case.

Moreover, even assuming, arguendo, that it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include a RAID subsystem in Immon, Immon still fails to disclose or in any way suggest that such a RAID subsystem would be managed by the same integrated management module that would be used to manage other layers of the database system.

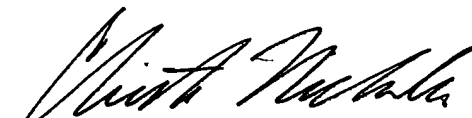
In addition, Immon still fails to teach or suggest the limitations recited in Claim 1, as described above. Claim 5 depends from Claim 1 and includes all of the elements of Claim 1. Therefore, it is submitted, respectfully, that Claim 5 is patentable over Immon for at least the reasons set forth herein with respect to Claim 1.

IX. CONCLUSION AND PRAYER FOR RELIEF

Based on the foregoing, it is respectfully submitted that the rejection of Claims 1-4 and 6-9 under 35 U.S.C. § 102(e) and the rejection of Claim 5 under 35 U.S.C. § 103(a) lacks the requisite factual and legal bases. Appellants therefore respectfully request that the Honorable Board reverse the rejection of Claims 1-4 and 6-9 under 35 U.S.C. § 102(e) over Immon. Appellants also respectfully request that the Honorable Board reverse the rejection of Claim 5 under 35 U.S.C. § 103(a) over Immon.

Respectfully submitted,

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on

9/15/03

by

Trudy Bagdon
Trudy Bagdon

CLAIMS APPENDIX

1 1. A method for managing a database system including one or more database
2 servers, the method comprising the steps of:
3 executing, at a console, an integrated management module configured to manage
4 at least two of the following layers in the database system: a database
5 application layer, a database server layer, an operating system layer, and a
6 hardware layer; and
7 interacting with a user interface provided by said integrated management module
8 to change operational parameters of said at least two layers.

1 2. The method of Claim 1 wherein:
2 the database server layer includes one or more database servers;
3 the operating system layer includes one or more operating systems that reside on
4 machines that are executing said database servers;
5 the integrated management module is configured to manage the one or more
6 database servers and one or more operating systems; and
7 the step of interacting with the user interface provided by said integrated
8 management module changes operational parameters of said one or more
9 database servers and said one or more operating systems.

1 3. The method of Claim 2 wherein:
2 the system includes one or more database clients;

3 said database clients are executing one or more database applications that
4 comprise said database application layer; and
5 said integrated management module is further configured to manage said one or
6 more database applications.

1 4. The method of Claim 2 wherein:
2 at least one hardware subsystem is used to execute said one or more database
3 servers; and
4 said integrated management module is further configured to manage said at least
5 one hardware subsystem.

1 5. The method of Claim 4 wherein said at least one hardware subsystem includes a
2 RAID subsystem managed by said integrated management module.

1 6. The method of Claim 2 wherein:
2 said one or more database servers reside on a local network; and
3 said console does not belong to said local network.

1 7. The method of Claim 6 wherein the console is connected to a wide area network
2 and said local network is connected to said wide area network, wherein said
3 console manages said one or more database servers through messages
4 communicated through said wide area network.

1 8. The method of Claim 6 wherein the console manages said one or more database
2 servers by messages sent over a dial up connection established between said
3 console and said local network.

1 9. The method of Claim 7 wherein said console manages said one or more database
2 servers and said one or more operating systems by changing metadata stored in a
3 centralized repository that resides on a device connected to said wide area
4 network, wherein said metadata includes data that reflects configuration
5 parameters of said one or more database servers and said one or more operating
6 systems, wherein changes made to said metadata in said centralized repository are
7 propagated over said wide area network to devices on said local network.



PTO/SB/21 (08-00)

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TRANSMITTAL FORM (to be used for all correspondence after initial filing)	Application Number	09/945,438	
	Filing Date	August 31, 2001	
	First Named Inventor	DIMITRIS NAKOS	
	Group Art Unit	2172	
	Examiner Name	SHADID AL ALAM	
Total Number of Pages in This Submission	58	Attorney Docket Number	50277-1787

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ENCLOSURES (check all that apply)		
<input checked="" type="checkbox"/> Fee Transmittal Form	<input type="checkbox"/> Assignment Papers (for an Application)	<input type="checkbox"/> After Allowance Communication to Group
<input checked="" type="checkbox"/> Fee Attached	<input type="checkbox"/> Drawing(s)	<input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences
<input type="checkbox"/> Amendment / Response	<input type="checkbox"/> Licensing-related Papers	<input checked="" type="checkbox"/> Appeal Communication to Group (Appeal Notice, Brief, Reply Brief)
<input type="checkbox"/> After Final	<input type="checkbox"/> Petition	<input type="checkbox"/> Proprietary Information
<input type="checkbox"/> Affidavits/declaration(s)	<input type="checkbox"/> Petition To Convert To a Provisional Application	<input type="checkbox"/> Status Letter
<input type="checkbox"/> Extension of Time Request	<input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address	<input type="checkbox"/> Other Enclosure(s) (please identify below):
<input type="checkbox"/> Express Abandonment Request	<input type="checkbox"/> Terminal Disclaimer	
<input type="checkbox"/> Information Disclosure Statement	<input type="checkbox"/> Request for Refund	
<input type="checkbox"/> Certified Copy of Priority Document(s)	<input type="checkbox"/> CD, number of CD(s) _____	
<input type="checkbox"/> Response to Missing Parts/Incomplete Application	Remarks	
<input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53		

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm or Individual name	Hickman Palermo Truong & Becker LLP CHRISTIAN A. NICHOLAS, Reg. No. 50,266.
Signature	
Date	September 15, 2003

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FEE TRANSMITTAL for FY 2003

Patent fees are subject to annual revision,
Small Entity payments must be supported by a small entity statement,
otherwise large entity fees must be paid. See Forms PTO/SB/09-12.
See 37 C.F.R. §§ 1.27 AND 1.28

TOTAL AMOUNT OF PAYMENT (\$)**320.00****Complete if Known**

Application Number 09/945,438

Filing Date August 31, 2001

First Named Inventor DIMITRIS NAKOS

Examiner Name SHADID AL ALAM

Group/Art Unit 2172

Attorney Docket No. 50277-1787

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METHOD OF PAYMENT (check one)

1. ☒ Throughout the pendency of this application, please charge any additional fees, including any required extension of time fees, and credit all overpayments to deposit account 50-1302. A duplicate of this sheet is enclosed.

Deposit Account Number

50-1302

Deposit Account Name

Hickman Palermo Truong & Becker, LLP

2. ☒ Payment Enclosed:
- ☒ Check ☐ Money Order ☐ Other

3. ☐ Applicant(s) is entitled to small entity status. See 37 CFR 1.27

FEE CALCULATION**1. BASIC FILING FEE**

Large Entity Fee Code	Large Entity Fee (\$)	Small Entity Fee Code	Small Entity Fee (\$)	Fee Description	Fee Paid
1001	750	2001	375	Utility filing fee	
1002	330	2002	165	Design filing fee	
1003	520	2003	260	Plant filing fee	
1004	750	2004	375	Reissue filing fee	
1005	160	2005	80	Provisional filing fee	

SUBTOTAL (1) (\$)**0.00****2. EXTRA CLAIM FEES**

Total Claims	Extra Claims	Fee from Below	Fee Paid
9	-20**= 0	18.00	0.00
1	-3**= 0	84.00	0.00
Multiple Dependent			

**or number previously paid, if greater; For Reissues, see below

Large Entity Fee Code	Large Entity Fee (\$)	Small Entity Fee Code	Small Entity Fee (\$)	Fee Description
1202	18	2202	9	Claims in excess of 20
1201	84	2201	42	Independent claims in excess of 3
1203	280	2203	140	Multiple dependent claim, if not paid
1204	84	2204	42	**Reissue independent claims over original patent
1205	18	2205	9	**Reissue claims in excess of 20 and over original patent

SUBTOTAL (2) (\$)**0.00****FEE CALCULATION (continued)****3. ADDITIONAL FEES**

Large Entity Fee Code	Large Entity Fee	Small Entity Fee Code	Small Entity Fee	Fee Description	Fee Paid
1051	130	2051	65	Surcharge - late filing fee or oath	
1052	50	2052	25	Surcharge - late provisional filing fee or cover sheet	
1053	130	1053	130	Non-English specification	
1804	920*	1804	920*	Requesting publication of SIR prior to Examiner action	
1805	1,840*	1805	1,840*	Requesting publication of SIR after Examiner action	
1251	110	2251	55	Extension for reply within first month	
1252	410	2252	205	Extension for reply within second month	
1253	930	2253	465	Extension for reply within third month	
1254	1,450	2254	725	Extension for reply within fourth month	
1255	1,970	2255	985	Extension for reply within fifth month	
1401	320	2401	160	Notice of Appeal	
1402	320	2402	160	Filing a brief in support of an appeal	\$320.00
1403	280	2403	140	Request for oral hearing	
1451	1,510	1451	1,510	Petition to institute a public use proceeding	
1452	110	2452	55	Petition to revive - unavoidable	
1453	1,300	2453	650	Petition to revive - unintentional	
1501	1,300	2501	650	Utility issue fee (or reissue)	
1502	470	2502	235	Design issue fee	
1503	630	2503	315	Plant issue fee	
1460	130	1460	130	Petitions to the Commissioner	
1807	50	1807	50	Petitions related to provisional applications	
1806	180	1806	180	Submission of information Disclosure Stmt	
8021	40	8021	40	Recording each patent assignment per property (times number of properties)	
1809	750	2809	375	Filing a submission after final rejection (37 CFR § 1.129(a))	
1810	750	2810	375	For each additional invention to be examined (37 CFR § 1.129(b))	
Other fee (specify)					
Other fee (specify)					

*Reduced by Basic Filing Fee Paid

SUBTOTAL (3) (\$)**320.00****SUBMITTED BY**

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Registration No. (Attorney/Agent) 50,266

Complete (if applicable)

Telephone (408) 414-1080

Signature

Date Sept. 15, 2003

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